


## Factors Related to Community Compliance with COVID-19 Health Protocols in Pardomuan I Village, Samosir Regency

Lusi Veronika Sinaga<sup>1\*</sup>, Donal Nababan<sup>2</sup>, Netti Etalia br Brahmana<sup>3</sup>  
Sari Mutiara Indonesia University, Indonesia

Article Info	ABSTRACT
<p><b>Keywords:</b> Knowledge, Attitude, Awareness, Age, Education, Compliance</p>	<p>This study aims to determine the factors associated with community compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency. This study is an analytical survey with a cross-sectional approach. This study was conducted in Pardomuan Village with a population of all heads of households and a sample size of 171 households from May to September 2021. Data were collected through interviews using a questionnaire and analyzed using the Chi-Square statistical test and binary logistic regression analysis. The results showed that there was a relationship between knowledge, attitude, level of awareness, age, and education with community compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency, and that there was a relationship between gender and community compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency. From the binary logistic regression test, it can be seen that the variables with the greatest influence are level of awareness, attitude, knowledge, education, age, and gender. It is hoped that the village authorities will collaborate with the community health center to conduct outreach on the COVID-19 Health Protocol to increase knowledge, change attitudes, and raise awareness among the community in implementing the COVID-19 Health Protocol. It is hoped that the community of Pardomuan I Village will comply with the COVID-19 Health Protocol so that the transmission of COVID-19 can be prevented and accurate information related to COVID-19 and the implementation of the COVID-19 Health Protocol can be obtained. -19.</p>
<p>This is an open access article under the <a href="#">CC BY-NC</a> license</p> 	<p><b>Corresponding Author:</b> Lusi Veronika Sinaga Sari Mutiara Indonesia University, Indonesia Jl. Kapten Muslim No.79, Helvetia Tengah, Kec. Medan Helvetia, Kota Medan, Sumatera Utara, 20123 <a href="mailto:lusiveronikasinaga11@gmail.com">lusiveronikasinaga11@gmail.com</a></p>

### INTRODUCTION

The Novel Coronavirus (2019-nCoV) first emerged at the end of 2019, originating in Wuhan City, China. The virus shocked the world as it rapidly spread and infected numerous countries. The World Health Organization (WHO) subsequently declared COVID-19 a global pandemic in March 2020 due to a significant and continuous increase in cases (WHO, 2020). According to the WHO Situation Report as of March 3, 2021, COVID-19 had affected 223 countries, resulting in 116,874,912 confirmed cases and 2,597,381 deaths (Ministry of Health [Kemenkes], 2021).

Initially, the disease was suspected to be pneumonia, with similar symptoms such as shortness of breath, fever, and cough. However, unlike influenza, COVID-19 can progress into severe infection leading to organ failure and even death, particularly among patients with comorbidities (Mona, 2020). In Indonesia, there were 1,392,945 confirmed cases with 37,757 deaths, representing a fatality rate of 2.7%—a relatively high mortality rate (Kemenkes, 2021). In North Sumatra Province, 25,521 cases (1.8%) were recorded, while in Samosir Regency there were 13 confirmed cases and 8 deaths caused by COVID-19.

The transmission of SARS-CoV-2 occurs rapidly, both from animals to humans and between individuals. Human-to-human transmission primarily occurs through respiratory droplets expelled when an infected person coughs or sneezes, which can then be inhaled by people nearby (Shereen et al., 2020). Clinically, infection can cause symptoms ranging from mild to severe acute respiratory syndrome that may lead to death (Guan et al., 2020). This situation requires the public to develop a high level of awareness and responsibility in implementing preventive measures.

To curb the spread of the virus, the Indonesian government implemented health protocols including mask-wearing, physical distancing, handwashing, avoiding crowds, and limiting public mobility (Kemenkes, 2021). The National COVID-19 Task Force has also actively promoted behavioral changes through public campaigns encouraging a “new normal” lifestyle. However, the enforcement of these behaviors remains challenging, as many citizens are still undisciplined and lack an understanding of the importance of compliance with health protocols.

The Ministry of Health (2021) emphasizes that the success of COVID-19 control efforts largely depends on public participation in implementing these health measures. Compliance is a crucial factor in preventing infectious diseases. According to Kozier (as cited in Marlina et al., 2022), compliance refers to behavior consistent with health recommendations, ranging from awareness to the execution of suggested actions. Albery and Munafo (2011) further state that compliance occurs when an individual’s actions align with the recommendations provided by healthcare professionals or other credible sources.

Numerous factors influence community compliance levels. Kozier identifies several determinants, including motivation, perception of health risks, knowledge, cultural background, and the quality of healthcare services. Kamidah adds that awareness and encouragement from close relatives also play an essential role. Almi (2020) argues that compliance can be improved through effective communication and clear public health campaigns that raise awareness about testing, treatment, and self-isolation practices.

Research by Riyadi and Larasaty (2020) revealed that males and younger age groups tend to have lower levels of compliance compared to females and older adults. Sociodemographic variables such as education level, marital status, and perceived risk also significantly influence compliance behavior. Similar findings were reported by Machida et al. (2020) in Japan, where 60–85% of respondents practiced partial compliance with health protocols, but only 34.7% adhered fully to WHO-recommended personal protective measures, indicating the need for stronger public education.

Public knowledge and awareness are closely linked to preventive behaviors. Pramita and Atiqoh (2020) found a strong correlation between knowledge and mask-wearing compliance, while Almi (2020) emphasized the role of self-efficacy in forming healthy habits. Nevertheless, Hamdani (2020) observed that many individuals still underestimate health protocols due to psychological factors, personality traits, educational background, and environmental influences.

A preliminary survey conducted in Pardomuan I Village revealed that only about 2.21% of residents consistently implemented COVID-19 health protocols. Among nine residents who had previously contracted the virus, most still neglected to wear masks or maintain physical distance. Interviews indicated that common reasons for noncompliance included discomfort while wearing masks, disbelief that COVID-19 existed in their area, and inconvenience in following the rules. These findings reflect a low level of public awareness and adherence to health protocols.

Based on the aforementioned conditions, the researcher is motivated to conduct a deeper investigation into the various factors influencing community compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency.

## METHODS

This study employed a quantitative approach with an analytical survey design using a cross-sectional method, aimed at identifying the relationship between various factors influencing community compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency, within a single data collection period. The study population consisted of all household heads in the village (1,385 households), from which a sample of 171 respondents was selected using the Lameshow formula and accidental sampling technique. Data were collected through questionnaires to capture respondent characteristics and through literature studies to support contextual understanding of the research topic. Data analysis was conducted using SPSS software, involving processes of data collection, verification, coding, and entry. The analyses included univariate, bivariate (Chi-square test), and multivariate (logistic regression) tests to identify dominant factors influencing compliance, with a significance level of  $\alpha = 0.05$ .

Instrument validity and reliability tests were conducted prior to data analysis. Validity testing indicated that only items with an  $r$ -calculated value greater than  $r$ -table (0.444) were deemed valid. Specifically, 16 of 20 items for compliance, 11 of 12 for knowledge, 11 of 13 for attitude, and 9 of 11 for awareness were valid and subsequently used for data collection. Reliability testing using Cronbach's Alpha showed all variables had alpha values above 0.444, namely 0.940 (compliance), 0.933 (knowledge), 0.847 (attitude), and 0.876 (awareness), indicating that all instruments were highly reliable and consistent for measuring the studied variables and suitable for further analysis.

## RESULTS AND DISCUSSION

### Univariate Analysis

**Table 1.** Proportion of Respondents' Compliance with COVID-19 Health Protocols in Pardomuan I Village, Samosir Regency

Compliance Level	N	%
Non-Compliant	103	60.2
Compliant	68	39.8
171	100.0	171

Table 1 shows that 60.2% or more than half of the respondents or community members of Pardomuan I Village, Samosir Regency, were not compliant with COVID-19 health protocols. Frequency Distribution of Independent Variables: Knowledge, Attitude, Awareness Level, Gender, Age, and Education of Respondents in Pardomuan I Village, Samosir Regency.

**Table 2.** Distribution of Independent Variables: Knowledge, Attitude, Awareness Level, Gender, Age, and Education of Respondents in Pardomuan I Village, Samosir Regency

Variable Knowledge	N	%
Poor	103	60.2
Good	68	39.8
Attitude		
Negative	87	50.9
Positive	84	49.1
Level of Awareness		
Low	95	55.6
High	76	44.4
Gender		
Male	100	58.5
Female	71	41.5
Age		
Early Adulthood	96	56.1
Late Adulthood	75	43.9
Education		
Low	91	53.2
High	80	46.8

Table 2 shows that most people in Pardomuan I Village, Samosir Regency, have poor knowledge (39.8% have good knowledge), negative attitudes toward health protocols (50.9%), and low awareness (55.6%). The majority of respondents were male (58.5%), young adults (56.1%), and had a low level of education (53.2%).

### Bivariate Analysis

**Table 3.** Correlation Between Knowledge and Compliance with COVID-19 Health Protocols

Variabel	Compliance				Total		<i>p</i> -value	OR	95%CI
	Non-Compliant		Complian		N	%			
	n	%	N	%					
Knowledge									
Poor	86	5	17	5	3	100	0,00	15,1	4,124-
Good	17	25	51	75	68	100	0	76	32,330

Table 3 shows that the level of compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency, was higher among respondents with good knowledge (75%) compared to those with less knowledge. There is a significant correlation between knowledge and compliance ( $p < 0.05$ ) with an OR of 15.176 (95% CI: 4.124–32.330), which means that respondents with good knowledge are 15 times more likely to comply with health protocols than those with less knowledge.

**Table 4.** Correlation Between Attitude and Compliance

Variabel	Compliance				Total		<i>p</i> -value	OR	95%CI
	Non-Compliant		Complian		N	%			
	n	%	N	%					
Knowledge									
Poor	82	3	5	5,7	87	100	0,00	49,2	17,58-
Good	21	25	63	75	84	100	0	0	137,68

Table 4 shows that the level of compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency, was higher among respondents with positive attitudes (75%) than among those with negative attitudes. There is a significant correlation between attitude and compliance ( $p < 0.05$ ) with an OR of 49.20 (95% CI: 17.58–137.68), which means that respondents with a positive attitude are 49 times more likely to comply with health protocols than those with a negative attitude, with a confidence interval of 17.58–137.68.

**Table 5.** Correlation Between Level of Awareness and Compliance

Variabel	Compliance				Total		<i>p</i> -value	OR	95%CI
	Non-Compliant		Compliant		N	%			
	n	%	N	%					
Low									
Awareness									
High	90	94,7	5	5,3	95	100	0	87,2	29,6-256,9
Awareness	13	17,1	63	82,9	76	100	0	3	

Table 5 shows that the level of compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency, was higher among respondents with a good level of awareness (64.3%) compared to those with a poor level of awareness. There is a significant correlation between awareness and compliance ( $p < 0.05$ ) with an OR of 87.23 (95% CI: 29.6–256.9), which means that respondents with good awareness are 87 times more likely to comply with health protocols than respondents with poor awareness.

**Table 6.** Correlation Between Gender and Compliance

Variabel	Compliance				Total		<i>p</i> -value	OR	95%CI
	Non-Compliant		Complian		N	%			
	n	%	N	%					
Male	73	42,	27	57,	100	0	0,00	3,69	1,93-,7,04
Female	30	3	41	7	71	100	0		

Table 6 shows that the level of compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency, was higher among female respondents (57.7%) than male respondents. There was a significant correlation between gender and compliance ( $p < 0.05$ ) with an OR of 3.69 (95% CI: 1.93–7.04), which means that female respondents were three times more likely to comply than male respondents.

**Table 7.** Correlation Between Age and Compliance

Variabel	Compliance				Total		<i>p</i> -value	OR	95%CI
	Non-Compliant		Complian		N	%			
	n	%	N	%					
Early Adulthood	80,	2	19,	8	100	0	0,00	7,63	3,82-15,25
Late Adulthood	77	34,	19	65,	96	100	0		
	26	7	49	3	75	100			

Table 7 shows that the level of compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency, was higher among older adult respondents (65.3%) than younger adults. There was a significant correlation between age and compliance ( $p < 0.05$ ) with an OR of 7.63 (95% CI: 3.82–15.25), meaning that older adult respondents were seven times more likely to be compliant than younger adult respondents.

**Table 8.** Correlation Between Education and Compliance

Variabel	Compliance				Total		<i>p</i> -value	OR	95%CI
	Non-Compliant		Complian		N	%			
	n	%	N	%					

Low Education	83,5	16,5	0,000	9,94	4,83-20,47
High Education	76,27	33,8	15,53	66,2	91,80

Table 8 shows that the level of compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency, was higher among respondents with higher education (66.2%) than those with lower education. There is a significant correlation between education and compliance ( $p < 0.05$ ) with an OR of 9.94 (95% CI: 4.83–20.47), which means that highly educated respondents are nearly 10 times more likely to comply than those with low levels of education.

### Multivariate Analysis

**Table 9.** Binary Logistic Regression Analysis Results

Variabel	Value p	OR	95% C.I.	Exp (B)
Knowledge	0,000	15,17	4,124-32,330	1.246
Attitude	0,000	49,20	17,58-137,68	12.860
Awareness	0,000	87,23	29,6-256,9	3.036
Gender	0,000	3,69	1,93-,7,04	2.126
Age	0,000	7,63	3,82-15,25	27.406
Education	0,000	9,94	4,83-20,47	11.119
Constant	0,000	0,000		

The binary logistic regression results presented in Table 9 indicate that the variables of knowledge, attitude, level of awareness, gender, age, and education have a significant effect on compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency ( $p < 0.05$ ). The strongest influences, in descending order, are shown by the level of awareness (OR=87.23), attitude (OR=49.20), knowledge (OR=15.17), education (OR=9.94), age (OR=7.63), and gender (OR=3.69). Respondents with higher awareness, positive attitudes, good knowledge, higher education levels, older adult age, and female gender tend to be more compliant in implementing health protocols compared to other groups.

### Relationship Between Knowledge and Compliance

The findings indicate that respondents with good knowledge were more compliant with COVID-19 health protocols (75%) compared to those with lower knowledge levels. There was a significant relationship between knowledge and compliance ( $p < 0.05$ ), with respondents possessing good knowledge being 15 times more likely to comply (OR=15.176; 95% CI: 4.124–32.330).

These findings align with previous studies. Wiranti et al. (2020) found that compliance with health protocols is influenced by gender, education, knowledge, and attitude. Similarly, Putra & Manalu (2020) reported a significant correlation between the level of public knowledge and the use of health protocols. Pramita & Atiqoh (2020) also confirmed a correlation between community knowledge and compliance in mask usage. Likewise, Rizqah

& Amelia (2021) stated that knowledge, attitude, and belief significantly affect mask-wearing compliance.

Therefore, it can be assumed that the higher an individual's knowledge regarding the benefits and risks associated with COVID-19, the more likely they are to comply with health protocols. The low level of knowledge among some residents of Pardomuan I Village may be influenced by relatively low education levels, highlighting the need for continuous education and socialization about the importance of implementing health protocols.

#### **Relationship Between Attitude and Compliance**

The results indicate that compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency, was higher among respondents with positive attitudes (75%) compared to those with negative attitudes. There was a significant relationship between attitude and compliance ( $p < 0.05$ ), with  $OR = 49.20$  (95% CI: 17.58–137.68), meaning that respondents with positive attitudes were 49 times more likely to comply than those with negative attitudes.

This result is consistent with findings by Afrianti & Rahmiati (2021) and Wiranti et al. (2020), both of whom found a significant correlation between attitude and public compliance with health protocols. These studies emphasized that individuals with positive attitudes are more likely to follow preventive measures against COVID-19.

Thus, it can be inferred that individuals with positive attitudes demonstrate greater awareness and responsibility toward COVID-19 prevention efforts. Conversely, negative attitudes often arise due to limited experience and understanding of health policies. Therefore, fostering positive attitudes is crucial to enhancing public compliance with health protocols.

#### **Relationship Between Gender and Respondents' Compliance with COVID-19 Health Protocols**

The study shows that compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency, was higher among female respondents (57.7%) than males. There was a significant relationship between gender and compliance ( $p < 0.05$ ), with  $OR = 3.69$  (95% CI: 1.93–7.04), indicating that females were three times more likely to comply than males.

This difference may be influenced by biological and social factors, as women are generally more health-conscious and tend to adopt healthy behaviors compared to men. This finding aligns with Riyadi & Larasaty (2020), who explained that women are more likely to comply with health protocols, while men tend to be less concerned. However, Pratama et al. (2021) found that gender does not directly affect knowledge levels regarding health protocols, as both genders have equal access to information.

Therefore, although women tend to be more compliant, gender may not be the main determinant of compliance since both genders have similar opportunities to understand the importance of health protocol implementation.

#### **Relationship Between Age and Respondents' Compliance with COVID-19 Health Protocols**

The findings revealed that compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency, was higher among late adults (65.3%) than early adults. A significant relationship was found between age and compliance ( $p < 0.05$ ), with  $OR = 7.63$

(95% CI: 3.82–15.25), indicating that late adults were seven times more likely to comply than early adults.

According to Santrock (1999) and Hurlock (1986), early adulthood is a period of transition and adjustment to new social roles, while late adulthood reflects emotional maturity, wisdom, and decision-making ability (Afrisani & Indati, 2020). This suggests that as age increases, individuals become more cautious and responsible in maintaining their health. These findings are consistent with Riyadi & Larasaty (2020) and Machida et al. (2020), who found that older individuals are more compliant with health protocols due to higher vulnerability to COVID-19 and a desire to set an example for younger generations. Thus, it can be concluded that older age tends to increase the likelihood of complying with health protocols, influenced by experience, social responsibility, and awareness of health risks.

### **Relationship Between Education Level and Respondents' Compliance with COVID-19 Health Protocols**

The results showed that compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency, was higher among respondents with higher education (66.2%) compared to those with lower education. There was a significant relationship between education and compliance ( $p < 0.05$ ), with  $OR = 9.94$  (95% CI: 4.83–20.47), indicating that respondents with higher education were nearly ten times more likely to comply.

According to Notoatmodjo (2003), education is a learning process that leads to behavioral changes toward maturity and individual development. Higher education levels enable individuals to better understand health information, evaluate the credibility of sources, and apply preventive actions. These results are consistent with Riyadi & Larasaty (2020), who found that education level significantly affects public compliance with health protocols. Respondents with higher education had greater compliance scores due to their understanding of COVID-19 risks and the importance of preventive efforts.

Thus, it can be concluded that the higher an individual's education level, the greater their awareness and compliance with health protocols, confirming that education plays a vital role in improving public health behavior.

### **Dominant Factor of Awareness Level on Respondents' Compliance with COVID-19 Health Protocols**

The findings indicate that awareness level significantly influences compliance with COVID-19 health protocols ( $p = 0.000$ ;  $OR = 87.23$ ). Respondents with good awareness were 87 times more likely to comply than those with poor awareness.

Puspandhani et al. (2021) also found that most respondents had good awareness (82.8%). According to Almi (2020), awareness can develop through personal experience and self-control, while Hamdani (2020) stated that low awareness is influenced by mental, educational, and environmental factors.

Based on the researcher's analysis, adult respondents tend to have relatively good awareness because they understand the importance of health protocols, and the increasing number of COVID-19 cases in their surroundings also motivates them to comply. Awareness thus becomes a key factor in breaking the chain of virus transmission.

## CONCLUSION

The findings show that knowledge, attitude, awareness, gender, age, and education significantly affect compliance with COVID-19 health protocols in Pardomuan I Village, Samosir Regency ( $p = 0.000$ ). Awareness was the most dominant factor—respondents with high awareness were 87 times more likely to comply. It is recommended that local governments enhance health monitoring through regular inspections, public campaigns, and sanctions for violations. The community should seek accurate health information and maintain consistent compliance. These findings can serve as a reference for future research exploring other determinants of health protocol compliance using more comprehensive analytical approaches.

## REFERENCE

- Afrianti, N., & Rahmiati, C. (2021). Faktor-Faktor yang Mempengaruhi Kepatuhan Masyarakat terhadap Protokol Kesehatan Covid-19. *Jurnal Ilmiah PERMAS*, 11(1).  
<https://journal.stikeskendal.ac.id/index.php/PSKM/article/view/1045>
- Afrisani, D. P., & Indati, A. (2020). Peran Body Image terhadap Self Esteem Remaja Putri Awal. Universitas Gadjah Mada.
- Almi. (2020). Analisis Penyebab Masyarakat tidak patuh pada protocol Covid-19.  
<https://almi.or.id/2020/06/05/analisis-penyebab-masyarakat-tidak-patuh-pada-protokol-covid-19>
- Annisa, D. (2022). Jurnal Pendidikan dan Konseling. *Jurnal Pendidikan Dan Konseling*, 4(1980), 1349–1358.
- Ayu, M. D. K., Sapti, M., & Anjarini, T. (2021). Deskripsi Kesadaran Siswa Sekolah Dasar pada Pembelajaran Daring Mata Pelajaran Matematika. *Jurnal Basicedu*, 5(5), 1525–1531.  
<https://journal.uui.ac.id/ajie/article/view/971>
- Hamdani. (2020). Kepatuhan Sosial di Era New Normal. Redaksi.  
<https://www.ajnn.net/news/kepatuhan-sosial-di-era-new-normal/index.html>
- Hartono, A. (2006). Terapi Gizi dan Diet Rumah Sakit Buku Kedokteran (Kedia). EGC.
- Hurlock, E. . (1986). Psikologi Perkembangan: Suatu Pendekatan Rentang Kehidupan (Terjemahan). Erlangga.
- Irawan, A., Sarniyati, & Friandi, R. (2022). Hubungan Pengetahuan Dengan Sikap Masyarakat Terhadap Penderita Skizofrenia di Wilayah Kerja Puskesmas Kumun Tahun 2022. *Prosiding*, 1(2), 705–713.
- Kemendes. (2020). Tanya Jawab Seputar Virus Corona (Covid-19). Kemendes RI, 66, 37–39.
- Listiana, D., Effendi, S., & Saputra, Y. E. (2020). Factors Associated with Compliance of Hypertension Patients in Undergoing Treatment at the Karang Dapo Community Health Center in Muratara District. *Journal of Nursing and Public Health*, 8(1), 11–22.
- Machida, M., Nakamura, I., Saito, R., Nakaya, T., Hanibuchi, T., Takamiya, T., Odagiri, Y., Fukushima, N., Kikuchi, H., Kojima, T., Watanabe, H., & Inoue, S. (2020). Adoption of personal protective measures by ordinary citizens during the COVID-19 outbreak in Japan. In *International Journal of Infectious Diseases* (Vol. 94, Issue April). The Author(s).  
<https://doi.org/10.1016/j.ijid.2020.04.014>

- Notoatmodjo, S. (2003). Pendidikan dan Perilaku Kesehatan: Ilmu Kesehatan Masyarakat. Rineka Cipta.
- Pramita, D. S., & Atiqoh, N. S. (2020). Hubungan Antara Pengetahuan Masyarakat Dengan Kepatuhan Penggunaan Masker Sebagai Upaya Pencegahan Penyakit Covid-19 Di Ngronggah. *Infokes: Jurnal Ilmiah Rekam Medis Dan Informatika Kesehatan*, 10(1), 52–55.
- Pratama, E., Fadhilla, & Afandi, A. (2021). HUBUNGAN KARAKTERISTIK SOSIODEMOGRAFI INDIVIDU DENGAN PENGETAHUAN TENTANG PROTOKOL KESEHATAN DALAM UPAYA PENCEGAHAN PENULARAN COVID-19 DI KABUPATEN TEMANGGUNG. Universitas Ngudi Waluyo.
- Puspandhani, M. E., Tanli, S. R., & Firdaus, S. N. A. (2021). Hubungan Tingkat Kesadaran dengan Kepatuhan Masyarakat dalam Penerapan Protokol Kesehatan pada Masa Pandemi Covid-19 di Wilayah Kerja UPT Puskesmas Plered Kabupaten Cirebon. *JOURNAL SCIENTIFIC OF MANDALIKA (JSM)* e-ISSN 2745-5955 | p-ISSN 2809-0543, 2(11), 565–575.  
<https://ojs.cahayamandalika.com/index.php/jomla/article/view/486>
- Putra, Y. I. W., & Manalu, N. V. (2020). Tingkat Pengetahuan Dengan Perilaku Warga Dalam Menjalankan Protokol Kesehatan Di Masa New Normal Pandemi Corona. *Coping: Community of Publishing in Nursing*, 8(4), 366.  
<https://doi.org/10.24843/coping.2020.v08.i04.p04>
- Riyadi, & Larasaty, P. (2020). Factors Affecting Community Compliance With Health Protocols In Preventing The Spread Of Covid-19). *Seminar Nasional Official Statistics 2020: Pemodelan Statistika Tentang Covid-19*, 19, 45–54.
- Rizqah, S., & Amelia, A. (2021). Hubungan Perilaku Masyarakat Dengan Kepatuhan Penggunaan Masker Untuk Memutus Rantai Penularan Covid-19 Di Kelurahan Bontoa Maros. *J Muslim Community Heal*, 2(3).
- Sambas, P. (2017). Faktor Internal Dan Eksternal Pembelajaran. *Tarbiya Islamica*, 5(1), 17–30.
- Santrock, J. W. (1999). A topical approach to life span development. McGrawHill-Companies, Inc.
- Saputro, A. A., Saputra, Y. D., & Prasetyo, G. B. (2020). Analisis Dampak Covid-19 Terhadap Kesadaran Masyarakat Dalam Penerapan Protokol Kesehatan. *Jurnal Porkes*, 3(2).  
<https://doi.org/https://doi.org/10.29408/porkes.v3i2.2865>
- Utami, N. T., Wolor, C. W., & Marsofiyati, M. (2023). Analisis Kepatuhan Kerja Anggota di Polsek Pademangan. *Jurnal Riset Rumpun Ilmu Sosial, Politik Dan Humaniora*, 3(1), 70–82. <https://doi.org/10.55606/jurrish.v3i1.2267>
- Wiranti, Sriatmi, A., & Kusumastuti, W. (2020). Determinan Kepatuhan Masyarakat Kota Depok Terhadap Kebijakan Pembatasan Sosial Berskala Besar Dalam Pencegahan Covid-19. *Jurnal Kebijakan Kesehatan Indonesia;JKKI*, 09(03), 1–424.  
<https://doi.org/10.2307/601235>